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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/632,881	07/31/2003	Erik Paulsen	03-0477	3033
24319	7590	08/02/2007		
LSI CORPORATION 1621 BARBER LANE MS: D-106 MILPITAS, CA 95035			EXAMINER MCCARTHY, CHRISTOPHER S	
			ART UNIT 2113	PAPER NUMBER
			MAIL DATE 08/02/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/632,881

Applicant(s)

PAULSEN ET AL.

Examiner

Christopher S. McCarthy

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 5/10/07.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6,8-12,14-18 and 20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6,8-12,14-18,20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-6, 8-12, 14-18, 20 are rejected under 35 U.S.C. 103(a) as being obvious over Gygi et al. U.S. Patent Application Publication US2003/0196149A1 in view of Microsoft Computer Dictionary (MCD).

As per claim 1, Gygi teaches a method for verifying operation of an initiator in bus architecture, comprising receiving a selected characteristic for testing (§ 0018); controlling a behavior of a target according to said selected characteristic (§ 0026); and validating operation of an initiator, whereby a response of said initiator to said behavior of said target is monitored to ensure proper initiator operation (§ 0018, 0028). Gygi does teach testing the bus in the system; however, does not explicitly teach wherein said selected characteristic for testing is at least one of XFER-READY data request size, disconnect boundaries, failure status packets, data overrun injection, data underrun injection, CRC error injection, protocol violations, varying simulated spin up times and scatter gather list variation for data. MCD does teach, at least, CRC which could be used as one of the parameter for bus testing for Gygi. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the CRC of MCD in the

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fault injection of Gygi. One of ordinary skill in the art would have been motivated to use the CRC of MCD in the fault injection of Gygi because MCD teaches wherein RCR checks data pattern compares to see if valid (page 116); an explicit desire of Gygi (§ 0018).

As per claim 2, Gygi teaches the method as claimed in claim 1, wherein said receiving of said selected characteristic for testing is part of a full domain testing scheme whereby a receipt of said selected characteristic is a single test of said full domain testing scheme (§ 0018, wherein, full domain is interpreted as both initiator and target testing).

As per claim 3, Gygi teaches the method as claimed in claim 1, wherein controlling said behavior of said target includes delivering an executing request to said target, said execution request including a vendor unique command (§ 0018).

As per claim 4, Gygi teaches the method as claimed in claim 3, wherein said vendor unique command relates to said selected characteristic for testing (§ 0026).

As per claim 5, Gygi teaches the method as claimed in claim 4, wherein said behavior of said target is controlled by the execution of the execution request by said target (§ 0026).

As per claim 6, Gygi teaches the method as claimed in claim 1, further comprising validating operation by monitoring a second response of said target to said response of said target initiator (§ 00340035, wherein, the target responds to the response to the of the initiator).

As per claim 8, Gygi teaches a system for verifying operation of an initiator in a bus architecture, comprising: means for receiving a selected characteristic for testing means for controlling a behavior of a target according to said selected characteristic; and means for validating operation of an initiator, whereby a response of said initiator to said behavior of said target is monitored to ensure proper initiator operation (§ 0018, 0026, 0028). Gygi does

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teach testing the bus in the system; however, does not explicitly teach wherein said selected characteristic for testing is at least one of XFER-READY data request size, disconnect boundaries, failure status packets, data overrun injection, data underrun injection, CRC error injection, protocol violations, varying simulated spin up times and scatter gather list variation for data. MCD does teach, at least, CRC which could be used as one of the parameter for bus testing for Gygi. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the CRC of MCD in the fault injection of Gygi. One of ordinary skill in the art would have been motivated to use the CRC of MCD in the fault injection of Gygi because MCD teaches wherein RCR checks data pattern compares to see if valid (page 116); an explicit desire of Gygi (§ 0018).

As per claim 9, Gygi teaches the system as claimed in claim 8, wherein said selected characteristic for testing is part of a full domain testing scheme whereby a receipt of said selected characteristic is a single test of said full domain testing scheme (§ 0018).

As per claim 10, Gygi teaches the system as claimed in claim 8, wherein said means for controlling said behavior of said target includes means for delivering an executing request to said target, said execution request including a vendor unique command (§0018).

As per claim 11, Gygi teaches the system as claimed in claim 10, wherein said vendor unique command relates to said selected characteristic for testing (§ 0018).

As per claim 12, Gygi teaches the system as claimed in claim 8, further comprising means for validating operation of said target by monitoring a second response of said target to said response of said initiator (§ 0034-0035).

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As per claim 14, Gygi teaches the system as claimed in claim 8, wherein said bus architecture operates according to s at least one of the following protocols: SCSI, SAS and Fibre Channel (§0001).

As per claim 15, Gygi teaches a method for verifying operation of an initiator in a bus architecture, comprising: receiving a selected characteristic for testing; delivering an execution request to said target, said execution request including a vendor unique command; executing of said execution request by said target; and validating operation of an initiator, whereby a response of said initiator to a behavior exhibited by said target is monitored to ensure proper initiator operation (§ 0018, 0026, 0028). Gygi does teach testing the bus in the system; however, does not explicitly teach wherein said selected characteristic for testing is at least one of XFER-READY data request size, disconnect boundaries, failure status packets, data overrun injection, data underrun injection, CRC error injection, protocol violations, varying simulated spin up times and scatter gather list variation for data. MCD does teach, at least, CRC which could be used as one of the parameter for bus testing for Gygi. It would have been obvious to one of ordinary skill in the art at the time the invention was mad to use the CRC of MCD in the fault injection of Gygi. One of ordinary skill in the art would have been motivated to use the CRC of MCD in the fault injection of Gygi because MCD teaches wherein RCR checks data pattern compares to see if valid (page 116); an explicit desire of Gygi (§ 0018).

As per claim 16, Gygi teaches the method as claimed in claim 15, wherein said receiving of said selected characteristic for testing is part of a full domain testing scheme whereby a receipt of said selected characteristic is a single test of said full domain testing scheme (§ 0018).

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As per claim 17, Gygi teaches the method as claimed in claim 15, wherein said behavior of said target is controlled by the execution of the execution request by said target (§ 0026).

As per claim 18, Gygi teaches the method as claimed in claim 15, further comprising validating operation of said target by monitoring a second response of said target to said response of said initiator (§ 0034-0035).

As per claim 20, Gygi teaches the method as claimed in claim 15, wherein said bus architecture operates according to at least one of the following protocols: SCSI, SAS and Fibre Channel (§ 0001).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(l)(1) and § 706.02(l)(2).

***Response to Arguments***

3. Applicant's arguments, see Remarks, filed 5/10/07, with respect to the rejection(s) of claim(s) 7, 13, 19 under USC102(e) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Gygi in view of MCD.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher S. McCarthy whose telephone number is (571)272-3651. The examiner can normally be reached on M-F, 9 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel can be reached on (571)272-3645. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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A handwritten signature in black ink, appearing to read 'C. McCarthy', with a long horizontal stroke extending to the right.

Christopher S. McCarthy  
Examiner  
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